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Canadian universities and degree-granting colleges

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Canada is a bilingual, multicultural country with two major cultural traditions. As a consequence, two systems of higher education have developed. One, originally patterned on the French system before the secularization of higher education in France, with the majority of the institutions under the direction of Roman Catholic orders or groups, has in recent years been adapted more and more to North American higher-education traditions. The other system was originally designed according to English, Scottish and United States practices; instruction is given in English, and the institutions are controlled by a variety of groups — governments, religious denominations and private, non-denominational bodies. A small third group of institutions offers instruction in both French and English. The first such bilingual institution to be established, the present University of Ottawa, developed from a Roman Catholic College opened in Ottawa in 1848. Laurentian University, established at Sudbury, Ontario, in 1960, is also a bilingual university.

Until 1763, education in the colony of New France was provided solely by institutions under religious auspices. The first such institution in which studies were undertaken at college level seems to have been the Collège des Jésuites, founded in 1635 in Quebec City. At about the same time, the Séminaire de Québec was founded by

diocesan priests. In 1852, the seminary was instrumental in the establishment of Laval University in Quebec City. A branch of Laval was opened in Montreal in 1878 and in 1920 it received a civil charter as the University of Montreal.

Three Kings' Colleges were among the first English-language institutions founded after the end of the French régime. One of these opened at Windsor, Nova Scotia, in 1789, and was later re-established at Halifax, N.S. A second opened at Fredericton, New Brunswick, in 1829 (though it traces its history back to the Academy of Arts and Sciences of 1785) and a third, though chartered in 1827 in Toronto as the state university of the Province of Upper Canada, did not offer instruction until 1843. These colleges were closely associated, at the time of their formation, with the Church of England. Early attempts to limit enrolment to Church of England adherents, coupled with the movement towards responsible government in the provinces, made these colleges targets of religious and political criticism and led to two of them becoming provincial universities (the University of Toronto — 1850; the University of New Brunswick — 1859). The third, University of King's College at Halifax, is today an Anglican, co-educational institution associated with Dalhousie University, Halifax.

Many denominational colleges were also founded in Ontario and the Atlantic provinces to fulfil the desire of

various religious groups to educate their young people in the atmosphere of their own faiths. These included such institutions as Acadia University at Wolfville, N.S. (Baptist — founded in 1838; denominational tests have never been permitted); Queen's University, Kingston, Ontario (Presbyterian when founded in 1841, but now non-denominational); Victoria College (founded in Cobourg, Ontario, by Methodists in 1836, and now located in Toronto under United Church direction); St. Francis Xavier University Antigonish, N.S. (Catholic — founded in 1853); and Mount Allison University Sackville, N.B. (Methodist, now United Church — founded in 1843). After the establishment of the University of Toronto, the Church of England founded its own University of Trinity College in 1852. Trinity is today federated with the University of Toronto.

The first non-denominational institution to be established in Canada was McGill University, Montreal (1821), which first gave instruction in 1829. Dalhousie University, Halifax, dates from 1818. However, except for a few years between 1838 and 1845, Dalhousie did not function as a university until 1863.

The University of Manitoba was established in 1877 as a degree-granting institution for three existing denominational colleges. It first granted earned degrees in 1880, and began to offer instruction in 1890. Except for a short period during which the Manitoba

Agricultural College was independent, and except for institutions granting degrees in theology only, the University of Manitoba was the sole degree-granting institution in the province until 1967. In that year, two affiliates of the University of Manitoba — Brandon College and United College — were granted university status as Brandon University and the University of Winnipeg.

In 1903, the legislature of the Northwest Territories (then composed of most of Western Canada east of British Columbia) passed an act for the establishment of a university. In 1905, part of the N.W.T. below the 60th parallel was divided into the present provinces of Alberta and Saskatchewan and the 1903 act was succeeded by acts in 1906 and 1907 authorizing the establishment of the University of Alberta (Edmonton) and the University of Saskatchewan (Saskatoon). Both universities established branch campuses, Alberta at Calgary in 1946 and Saskatchewan at Regina in 1961. In 1966, the University of Alberta at Calgary was established as a non-denominational, co-educational and provincial university, under the name of the University of Calgary. In 1974, the Regina campus of the University of Saskatchewan severed its ties with the university and became the University of Regina, a provincial, non-denominational and co-educational institution.

Federal government involvement in higher education

An act passed in 1908 resulted in the opening of the University of British Columbia in 1915. Before that, instruction at college level in British Columbia had been given mainly by institutions connected with McGill University and the University of Toronto. Until 1963, the University of British Columbia was the only institution of higher learning in the province. In that year, two colleges, Notre Dame and Victoria, became Notre Dame University of Nelson and the University of Victoria. A fourth university, Simon Fraser, enrolled its first students in 1965. In 1977, Notre Dame ceased to exist as a university.

(1) University financing

The British North America Act, which created and broadly defined Canada as a federal state in 1867, assigned to the provinces jurisdiction over education. However, the federal government did become directly involved in higher education as early as 1876, when it established the Royal Military College at Kingston, Ontario.

At the end of the Second World War, the government recognized an obligation to assist the universities which had seen their enrolments double from 1945 to 1947, with the return of the war veterans, and for the first time made direct subsidies to the universities. In 1951, following the recommendation of a royal commission on the arts, letters and sciences, the federal government distributed to the provinces 50 cents a head of their population to help support the universities. The *per capita* grant was increased to \$1 in 1957, \$1.50 in 1960, \$2 in 1962 and \$5 in 1966.

In 1966, the federal government ceased making direct subsidies to the universities, except in aid of the Royal Military College and research. Instead, the provinces were given additional taxing powers, at the expense of the federal government, and promised supplements to meet 50 per cent of the cost of supporting the universities. The total federal transfers and payments to the provinces rose from \$422 million in 1967-68 to \$1,530 million in 1975-76. In

1972, amendments to the Federal-Provincial Fiscal Arrangements Act set a yearly maximum of 15 per cent on the rate of increase of the federal contribution.

In 1977, according to the Federal-Provincial Fiscal Arrangements and Established Programs Financing Act, the federal government transferred additional tax points with respect to both personal and corporate income tax to the provinces, to support post-secondary education in their jurisdictions. Also according to the 1977 act, the federal government provides *per capita* cash grants to the provinces.

(II) Research

University research in Canada is largely dependent on public funds for its support and maintenance. The government of Canada has established three granting councils for the support of research that together cover all academic disciplines: the Medical Research Council, the Natural Sciences and Engineering Research Council and the Social Sciences and Humanities Research Council. The cumulative budget of the three granting councils for the operating year 1980-1981 is \$286.5 million.

(III) Student assistance

The Canada Student Loans Act, passed in 1964, is the basis upon which the federal government makes financial help available to students who require assistance to carry on full-time studies at the post-secondary level of

education. Under the Canada Student Loans Program, which is administered jointly with the provincial aid scheme in nine provinces, the federal government guarantees loans made by chartered banks and other designated lenders to students on the basis of certificates of eligibility (loan authorization documents) issued by the provinces participating in the Program.

Assistance under the Canada Student Loans Program is limited to Canadian citizens and to landed immigrants. In operation year 1978-79, over 132,000 students received assistance under the program and the value of loans issued in that year was \$159.3 million.

(IV) International aspects

In an effort to enhance the role of Canadian universities in international development co-operation, the Canadian International Development Agency (CIDA) and the International Development Research Centre (IDRC) provided the funds for the establishment of the International Development Office (IDO) as part of the Association of Universities and Colleges of Canada in 1977.

The IDO will assist Canadian universities in developing research policies to coincide with the needs of developing countries, in conducting academic planning to include international participation, and in identifying institutional resources which can best be allocated to meet the increasing demands from Third World countries for Canadian academic expertise.

The federal government, under the auspices of the Department of External Affairs, has signed technical and cultural agreements with a number of countries which call for the bilateral exchange of students and academic personnel. Also, a number of countries such as Venezuela and the People's Republic of China have made arrangements either through the Department of External Affairs or directly with the universities for the placing of students, researchers and scholars within Canadian institutions of higher learning.

Canadian universities are, in their own right, interested in developing and maintaining relations with institutions and agencies in the developing and developed worlds. A survey of programs of co-operation between Canadian universities and foreign institutions conducted by the Association of Universities and Colleges of Canada (AUCC) revealed that, in 1976, there were at least 432 such ongoing programs established to exchange information, expertise, staff, research workers or students or to collaborate in research, teaching or other projects.

Each province has its own university system. Universities have virtually total autonomy in the areas of academic matters and internal fiscal management, but financially they are almost totally dependent upon the provinces. About 85 per cent of their operating income is received by way of provincial government grants, the remainder being accounted for by student fees and miscellaneous income.

A university system is generally composed of four elements, although every element may not necessarily be found in each provincial system. The first element consists of the individual institutions. The second is the collectivity of universities, that is the voluntary association of universities to deal with common concerns. Thirdly, all provinces, except Newfoundland and Alberta, have either individually or, in the case of the maritime provinces, collectively established some kind of a "buffer body" as an intermediary between government and the universities. Conceived as instruments to maintain a balance between public accountability on the government side and institutional autonomy on the university side, these bodies normally have government-appointed members representing government, education and community interests. Their mandate generally requires them to advise government on the development of higher education, to make recommendations regarding

the level of financial support to universities and sometimes also to distribute grants among the institutions, and to plan and co-ordinate with the universities the implementation of programs to meet the educational needs of the province or region. The fourth and last element of a system consists of the government, with either a department with responsibility for all levels of education or a separate department for higher education only.

There are some links which, though not leading to a country-wide, unified university system, connect the individual provincial systems at the national level. Thus we find the Council of Ministers of Education, Canada, which provides a mechanism for consultation and interaction in educational matters of common interest to the various provincial governments, and the Association of Universities and Colleges of Canada which, as the voluntary organization of the Canadian universities, does the same for its members.

The following description of the provincial university system will concentrate on the main, non-denominational universities. No mention is made of church-related institutions, or federated and affiliated colleges.

Newfoundland: Memorial University is the only university in the province. As already indicated, there is no intermediary or buffer body between the government and the university in Newfoundland and, accordingly, Memorial

deals directly with the provincial government. Funding matters are the concern of a special cabinet committee on university affairs, while day-to-day relationships depend on direct contact between the university and the departments of education and finance.

Prince Edward Island, Nova Scotia, New Brunswick: The maritime provinces, with a number of small to medium-sized university-level institutions (one on Prince Edward Island, four in New Brunswick and 13 in Nova Scotia), have created one body, the Maritime Provinces Higher Education Commission (MPHEC), to act as an intermediary between the region's universities and the governments of the three provinces. Established to assist the provinces and institutions in attaining a more efficient use and allocation of higher education resources in the region, MPHEC reports to the Council of Maritime Premiers. Through the Council, MPHEC annually presents to the provincial legislatures its recommendations on the level of financial assistance to the universities. Each legislature determines its own level of funding for the institutions within its jurisdiction; the resulting grants are distributed to the universities, in New Brunswick and Prince Edward Island by the Commission and in Nova Scotia by the Minister of Education, following the Commission's recommendation.

The maritime universities and Memorial University of Newfoundland

have created the Association of Atlantic Universities (AAU), a voluntary organization whose aims are to ensure high academic standards, in co-ordinating higher education and avoid unnecessary duplication of programs. A co-operative effort between AAR and MPHEC resulted in a commonly-accepted allocation formula for operating grants: about 75 per cent of the total is allocated to the universities as a flat grant, whereas enrolments form the basis for allocating the remaining 25 per cent.

Quebec: There are nine institutions in Quebec with enrolments ranging from just over 1,000 to approximately 25,000 full-time equivalent students. Three of them are English-language universities (Bishop's, Concordia and McGill) and four are French-language institutions (Laval, Montréal, Sherbrooke, and the Université du Québec). The last is a decentralized, multi-unit institution comprising, amongst others, four constituent universities, a learning centre, and a distance-learning facility.

At the institutional level, the co-ordinating body is the Conference of Rectors and Principals of Quebec Universities. This voluntary organization provides a forum for information exchange between its members and for concerted actions and studies. It also serves as a convenient channel through which the government can consult the universities as a group.

At the government level, responsibility for higher education is entrusted to the Ministère de l'Éducation and within it, to the Direction générale de l'enseignement supérieur. Relating directly to the universities, it takes an active part in the development of higher education in Quebec and allocates to the universities the funding provided by the government in support of higher education. The government's main adviser in university affairs is the Conseil des universités, established in 1969. This body may, on its own initiative, counsel the government concerning the needs of higher education and the measures to meet these needs; it must by law be consulted by the government in certain matters such as the level and distribution of annual support to universities, but the government is not obliged to follow its recommendations.

The Conseil supérieur de l'éducation, created in 1964, advises the government regarding all levels of education and has, at one of its standing committees, the Commission de l'enseignement supérieur to deal in particular with university education. While the government is obliged to consult this council in certain matters, the more specialized Conseil des universités has, since its creation in 1969, become its main source of advice in university affairs.

Ontario: Responsibility for post-secondary education rests with the Ministry of Colleges and Universities; its University Affairs Division, designed to develop and analyze policy on university-related matters, deals with the provincially-assisted university system, which comprises 18 institutions: 15 universities (Brock, Carleton, Guelph, Lakehead, Laurentian, McMaster, Ottawa, Queen's, Toronto, Trent, Waterloo, Western Ontario, Wilfrid Laurier, Windsor and York) and three institutes (Ontario College of Art, Ontario Institute for Studies in Education and Ryerson Polytechnical Institute). In enrolment size, these institutions show a great diversity: seven institutions have fewer than 5,000 full-time equivalent students, six range from 5,000 to 12,000 students, four from 12,000 to 19,000, while one university, Toronto, enrolls more than 35,000 students.

The 15 provincially-supported universities are members of the Council of Ontario Universities (COU). This organization provides a focus for the interaction of the universities with one another, participates in the decision-making process of the system as a whole, is usually the collective voice in matters which concern all institutions, and maintains liaison between the universities and the government and its agencies.

The Ontario Council on University Affairs (OCUA) is the intermediary body between the government and the

universities. As the government's main adviser in matters relating to the university sector, OCUA reviews the annual funding proposals submitted to it by individual institutions and COU, and then advises the government on the total level of support and its allocation to the universities.

Manitoba, Saskatchewan, Alberta, British Columbia: Although the four western provinces do not have a single university system, there are two bodies that provide for some links between the individual provincial systems. The Western Canada Post-Secondary Coordinating Committee provides a forum for discussion and action by the four provincial ministers responsible for higher education, and the Council of Western Canadian University Presidents (COWCUP) represents the universities in the region. As an illustration of western co-operation, mention can be made of an interprovincial agreement to centralize the training of veterinarians by the establishment of a single school for the region, the Western College of Veterinary Medicine at the University of Saskatchewan.

The university system in Manitoba, Saskatchewan and British Columbia bears a great deal of resemblance. In each of the three provinces, the system consists of a relatively small number of universities: three in Manitoba (Brandon, Manitoba and Winnipeg), two in Saskatchewan (Regina and

Saskatchewan) and three in British Columbia (British Columbia, Simon Fraser and Victoria). Also in each province, an advisory body has been established by the government to act as an intermediary between the minister responsible for higher education and the universities: the Universities Grants Commission in Manitoba, the Saskatchewan Universities Commission, and the Universities Council of British Columbia. In addition to their general advisory task and their role in planning and co-ordinating university education, they have the mandate to review the universities' budget requests, to advise their governments on the total level of funding and to distribute to the universities the funds appropriated by government.

In Alberta there is no intermediary body between government and the universities. Government planning for and co-ordination of higher education is the responsibility of the Department of Advanced Education and Manpower, which deals directly with the institutions regarding budgetary requirements and provincial grants.

The university sector consists of four institutions: The University of Alberta, which enrolls about 19,000 full-time students; Calgary with some 11,000 students, Lethbridge with about 1,500 students; and Athabasca, established in 1970 to offer distance-learning opportunities. To provide for co-ordination among these institutions, the

Alberta Universities Act has established a statutory body, the Universities Co-ordinating Council; consisting of representatives of the four universities, the Council has the authority to inquire into all matters requiring co-operative decisions or actions and to give advice to both the universities and government.

Government of institutions

Civil legislation regarding the establishment of new institutions, or changes in existing ones, is usually enacted by provincial legislatures, except for federal military colleges and a few institutions originally established by act of Parliament.

The two-tier, or bicameral, system of university/government is in effect at all but three universities in Canada. Once an institution is legally chartered its corporate powers are vested in a governing body, generally known as the board of governors. The board of most universities usually comprises representatives of government, industry, university administration, faculty, undergraduate and graduate student bodies, and alumni. Its function is to conserve the property and increase the means of the university, to oversee the university's financial operations and to maintain liaison with governments and the general public.

The effective responsibility of all academic matters is, as a rule, assigned to a senate. Most senates are composed mainly of representatives of

faculty and academic administrators; student representatives are also included on the senates of most institutions. The chief executive officer is usually an *ex-officio* member of senate and, at a number of universities, this person serves as chairman. Senates are responsible for matters such as admissions, course offerings, program development, academic discipline and the awarding of degrees.

Three universities, Athabasca University, Université Laval, and the University of Toronto, have adopted the unicameral system of university government, i.e. a single body incorporating the powers of board and senate.

Apart from the president, the senior officers are: the vice-presidents, each usually responsible for a particular area of university life (academic matters, administration, finance, research); registrar, who often acts as secretary to the various boards and whose office usually admits students, prepares timetables and keeps student records; the business officer (often called comptroller or bursar), whose office is charged with the day-to-day financial operation of the institution, including the collection of fees; and deans and department heads, who administer faculty and departmental affairs. Other administrative posts may include an admissions officer, deans of men and of women, a librarian, a development officer, an information and/or public

relations officer, a research administrator and an institutional research officer.

Teaching staff

The lowest teaching rank is that of lecturer. This is usually a one-year appointment and the candidate will be expected to have at least a master's degree. Most appointments, however, are made initially at the rank of assistant professor. From this point, faculty members become eligible for promotion to the ranks of associate professor and professor.

For appointment to a university staff, a doctoral degree is usually expected. Faculty members appointed without this qualification are expected to continue their studies towards the doctorate. In some professional faculties, some staff have professional qualifications only, but the trend is toward possession of the highest degree. From 1958-59 to 1978-79 the proportion of full-time university teachers holding the doctorate rose from 42 per cent to 63 per cent.

The expansion in the number and size of Canadian universities in the 1960s required the recruitment of many faculty members, many of whom came from abroad. However, recent changes in federal immigration and employment requirements are aimed at ensuring that non-Canadians are hired only if all efforts to recruit a qualified Canadian have been exhausted.

Most teaching posts are advertized in *University Affairs*, a periodical of news and opinion published ten times a year by the AUCC. *University Affairs* is distributed free to members of AUCC member institutions. Yearly subscription rates are: \$7 third class in Canada, \$10.50 first class; outside Canada, \$8.25 surface mail and \$14 air mail. Single copy price is \$1.50 in Canada, \$3 outside Canada. Some academic vacancies are also advertized in the *Bulletin*, published by the Canadian Association of University Teachers.

Faculty unions are a comparatively recent development in Canada. The first was established in 1970 and the first collective agreement signed in 1974. By 1980, more than 72 per cent of full-time members of faculty in Canadian universities were members of collective bargaining units — either certified under provincial labour law or “special plan” units not regulated by provincial legislature. The provinces of British Columbia and Alberta forbid certification of faculty unions.

Most academics are served by a local faculty association which, for unionized faculty members, is the bargaining agent. Local associations are grouped into provincial federations and also into a national body — the Canadian Association of University Teachers (CAUT) (in Quebec, the *Fédération des associations de professeurs d’université du Québec*, a member with special status of the CAUT).

Types of institution

In Canada, an institution of post-secondary education that has the power to grant degrees is usually called a university. However, several are called colleges, a few are institutes and one is a school.

A university or college may be associated with another university (often called a “parent” university) as a federated, affiliated or constituent institution. A federated institution is responsible for its own administration and has the power to grant degrees; while in federation, it holds some or all of its degree-granting powers in abeyance. An affiliated institution is responsible for its own administration but does not have the power to grant degrees. A constituent university or college is an integral part of the parent university with respect to both administrative and academic matters.

There are 65 degree-granting institutions in Canada, of which 12 hold in abeyance some or all of their degree-granting powers while in federation with other universities. Of the 65, six use French as the language of instruction. The others are basically English-language institutions, but four of them have among their constituents or affiliates a faculty in which some or all of the courses for a degree are taken in French.

Almost all of the universities and their affiliates are co-educational. Only

one, Brescia, is for women only. There are no institutions restricted to men.

The universities range in size and complexity from those with more than 20,000 full-time students and a dozen colleges, faculties and schools to those enrolling fewer than 1,000 students. The total enrolment of full-time students is now about 375,000 with part-time students in degree courses exceeding half that number.

Since education in Canada is a provincial responsibility, each province awards its certificate of completion of secondary-school studies. Canadian universities have individual admission requirements based on certificates awarded in the province, but all treat the appropriate certificate of other provinces as approximately equivalent.

Students usually begin post-secondary education at the age of 17 or 18, after 11 to 13 years of elementary and secondary schooling. In Newfoundland, students enter university after 11 years of schooling; in Nova Scotia, Prince Edward Island, New Brunswick, Manitoba, Saskatchewan, Alberta and British Columbia, 12 years of study are required before students are admissible to university; in Ontario, 13 years of study are required. In Quebec, students complete secondary school at the end of Grade 11 but those wishing to undertake university studies must first complete two years of study at a college of general and vocational education (CEGEP).

Some professional degree programs, like programs of study in arts and science, may be entered directly from secondary school. Examples are agriculture, engineering and pharmacy. Others require the applicant to have completed some or all of a first-degree in arts or science.

Most universities are flexible about admitting to first-degree programs

(usually those in arts and science) persons with unconventional patterns of previous schooling, provided that they have been out of school for a number of years and can show promise of success in university. The most common requirement for this kind of "mature matriculation" is that applicants be at least 21 years of age and have been away from full-time schooling for two or more years. Detailed requirements for admission to universities are provided in the calendars of various institutions. The *Directory of Canadian Universities*, published yearly by the Association of Universities and Colleges of Canada, is also a useful source of information on university programs, admission requirements and costs. The price of the 1980 directory is \$9 in Canada, \$11 in the United States and \$12.50 in other countries.

All Canadian universities admit students from other countries, and usually indicate in their calendars and in the *Directory of Canadian Universities* how educational qualifications obtained abroad are equated with Canadian requirements.

Applicants from abroad must obtain a student authorization and/or visa from a Canadian government representative in their home country in order to study in Canada. To fulfil immigration requirements, applicants must give assurance of having been admitted to a university or other approved educa-

tional institution, and of having sufficient funds to meet total expenses including tuition and room and board while in Canada as well as for the return journey. Student authorizations and visas are valid for a specified program, for a pre-determined period, at a particular institution and cannot be changed once the student has arrived in Canada.

It is usual for students from abroad, whose schooling was not in the language used in the university in which they propose to study, to be required to demonstrate their proficiency in that language. The French-language institutions set their own tests. The English-language universities accept the evidence of tests in international use, usually the test of English as a Foreign Language (TOEFL) and, less frequently, the University of Michigan English Language Test or the University of Cambridge Certificate of Proficiency in English. In addition, it is usual for Canadian universities to require that records of former schooling be accompanied by notarized translation in English or French, as the case may be.

Some universities impose quotas on the number of foreign students who may be admitted to certain faculties.

Academic year

For most full-time students the academic year consists of two terms or semesters of little less than four

months each, September to December and January to April.

In addition, most universities organize a summer session of six weeks from the beginning of July to mid-August and some offer, as well, a four-week inter-session in late spring. A variation which is not so common provides for year-round operation with three terms or semesters, the third running from May to August.

Where the two-term pattern is in effect it is usual for students to begin in September, although provision is occasionally made for entry in January. Where there is a three-term or semester calendar, students may enrol for any one, two or three terms during the year.

More than a dozen universities organize studies in some faculties on what is called the co-operative plan, alternating full-time study on campus during one term with full-time employment providing supervised work experience during the next.

Part-time study

There is a variety of arrangements for part-time students. The most usual is to provide instruction in the late afternoon or evening, or both, during the regular university terms. This may be done on campus or in other areas served by the university, in some cases in towns as distant as 500 kilometres away. Still greater extension of the range of service is provided by a few universities with "open-university" type

facilities, usually involving instruction by correspondence, supplemented by the use of audiotapes, radio broadcasts, television or video-tapes.

Students

Full-time university student enrolment decreased marginally in recent years, as indicated in the following table:

Academic year	Full-time enrolment
	Thousands
1930-31	32.9
1940-41	36.3
1950-51	68.3
1960-61	113.3
1970-71	316.9
1975-76	340.8
1976-77	349.2
1977-78	347.0
1978-79	341.1

Of the 341,100 full-time students in 1978-79, 34,300, or approximately 10 per cent, were graduate students.

In 1978-79, there were 123,000 part-time students enrolled in Canadian universities and colleges. Of these 24,300, or 19.6 per cent were graduate students.

There were some 39,267 full-time foreign students attending Canadian universities and colleges in 1978-79. Of this number, 33.9 per cent came from Asia, 30 per cent from Europe, 17.7 per cent from the United States and 7.1 per cent from Africa.

There were 117,683 degrees, diplomas and certificates granted in 1978, an increase of 5.1 per cent over the previous year's figure. At the graduate level the increase was 5.6 per cent and at the undergraduate level 5.0 per cent.

Student costs

The costs of instruction are highly subsidized in Canada, primarily by governments, and the tuition fees payable by students cover less than 15 per cent of total university operating income. For a full-time student, the tuition fees payable may range from \$450 for an academic year of two terms in arts and science to more than \$1,200 in medicine and dentistry.

In six provinces, Alberta, Ontario, Quebec, New Brunswick, Nova Scotia and Prince Edward Island, the tuition fees charged to students from other countries are considerably higher than those for Canadians, ranging from \$968 to \$1,700 depending on the program of study.

Other student expenses include books, supplies and instruments, and a student activities fee, as well as those which would apply equally to anyone living in Canada: accommodation, food, laundry, transportation, health care, clothing and entertainment. Students not living at home may spend from \$4,600 to \$7,600 for each 12-month period.

To help meet these costs, the government of Canada has instituted the Canadian Student Loans Plan, which has been described earlier in this reference paper. In addition, the provinces provide repayable and/or non-repayable assistance in the form of grants, bursaries and scholarships. This assistance is available only to Canadian citizens and landed immigrants who have resided in the particular province for at least one year.

Certain federal departments do make awards, and many private scholarships and bursaries are available at all levels of higher education. Relatively few university-entrance awards are open to students from outside Canada, though foreign students who have completed a year of study at the higher education level in Canada can usually compete with Canadian students for "in-course" awards.

APPENDIX I

Degree-granting universities and colleges in Canada

(The full-time student enrolment of the institutions for the academic year 1979-80 is indicated in brackets.)

NEWFOUNDLAND

Memorial University of Newfoundland, St. John's (6,476) — degrees in arts, science, education, engineering, medicine, nursing, physical education, social work, business administration and commerce, forestry.

PRINCE EDWARD ISLAND

University of Prince Edward Island, Charlottetown (1,332) — degrees in arts, science, business administration, education, engineering, home economics, music.

NOVA SCOTIA

Acadia University, Wolfville (2,640) — degrees in arts, science, applied science, secretarial science, business administration, education, home economics, music, recreation and physical education, theology.

Dalhousie University, Halifax (6,623) — degrees in arts, science, commerce, costume studies, dentistry, education, engineering, environmental studies, human and communication disorders, law, library science, medicine, music, nursing, pharmacy, physical education, physiotherapy, public administration, social work.

University of King's College, Halifax (378) — degrees in arts, science, divinity, journalism.

Mount Saint Vincent University, Halifax (1,541) — degrees in arts, science, business, education, home economics, public relations.

Nova Scotia Agricultural College, Truro (427) — degrees in agriculture

Nova Scotia College of Art and Design, Halifax (470) — degrees in design, fine arts and art education.

Université Sainte-Anne, Church Point (185) — degrees in animation, arts, business administration, education, science, secretarial sciences.

St. Francis Xavier, Antigonish (2,070) — degrees in arts, science, secretarial arts, business, education, engineering, home economics, nursing, social leadership.

St. Mary's University, Halifax (2,097) — degrees in arts, science, commerce, education, engineering.

Technical University of Nova Scotia, Halifax (781) — degrees in architecture, engineering.

NEW BRUNSWICK

Université de Moncton, Moncton (2,779) — grades offerts en arts, administration, droit, éducation, génie, sciences domestiques, sciences infirmières, sciences pures, sciences sociales et du comportement.

Mount Allison University, Sackville (1,468) — degrees in arts, science, commerce education, engineering, fine arts, music, secretarial science, theology.

University of New Brunswick, Fredericton (6,252) — degrees in arts, science, business administration, computer sciences, education, engineering, forestry, law, nursing, physical education and recreation.

St. Thomas University, Fredericton (685) — degrees in arts, education, social work.

QUEBEC

Bishop's University, Lennoxville (888) — degrees in arts, science, business administration, education, theology.

Concordia University, Montreal (10,636) — degrees in arts and science, commerce, engineering, fine arts.

Université Laval, Québec (17,543) — grades offerts en arts, sciences et génie, activité physique, actuariat, administration, architecture/aménagement du territoire, droit, éducation, enseignement, études anciennes, lettres, musique, sciences agronomiques et de l'alimentation, sciences forestières et géodésiques, sciences humaines et sociales, sciences de la santé.

McGill University, Montreal (14,999) — degrees in arts, science, agriculture, architecture, computer sciences, dentistry, education, engineering, food science, human communication disorders, law, library science, management, medicine, music, nursing, physical and occupational therapy, religious studies, social work, urban planning.

Université de Montréal, Montréal (18,532) — grades offerts en administration des affaires, administration des services de santé, aménagement, architecture, urbanisme, droit, éducation physique, études médiévales, génie, histoire et sociopolitiques des sciences, hygiène, médecine, médecine dentaire, médecine vétérinaire, musique, optométrie, pharmacie, réadaptation, sciences de l'éducation, sciences humaines et sociales, sciences infirmières, sciences pures, théologie.

Université du Québec, siège social à Ste-Foy (14,604) — quatre unités constituentes: Montréal, Chicoutimi, Trois-Rivières, Rimouski; trois écoles supérieures: l'École nationale d'administration publique, l'École de technologie supérieure et le Centre d'études universitaires dans l'Ouest québécois; deux instituts de recherche: l'Institut national de la recherche scientifique et l'Institut Armand Frappier; et une autre unité constituante: La Télé-Université. — Grades offerts en administration, beaux-arts et arts appliqués, design de l'environnement, droit, éducation, études plurisectorielles, génie, lettres, sciences de la santé, sciences humaines et sociales, sciences pures et appliquées, services publics et communautaires.

Université de Sherbrooke, Sherbrooke (6,731) — grades offerts en administration, arts, droit, éducation physique et sportive, génie, médecine, notariat, pédagogie, sciences, théologie.

ONTARIO

Brock University, St. Catharines (2,170) — degrees in arts, science, administration, education, physical education.

Carleton University, Ottawa (9,228) — degrees in arts, science, architecture, commerce, engineering, industrial design, journalism, public administration, social work.

Collège dominicain de philosophie et de théologie, Ottawa (176) — grades offerts en philosophie, théologie, pastorale.

University of Guelph, Guelph (9,421) — degrees in arts, science, agricultural science, hotel and food administration, landscape architecture, engineering, veterinary medicine, family and consumer studies.

Lakehead University, Thunder Bay (2,519) — degrees in arts, science, education, business administration, engineering, forestry, library technology, nursing, physical and health education.

Laurentian University, Sudbury (2,615) — degrees in arts, science, commerce, sports administration, education, engineering, nursing, translation and interpretation, physical and health education, social work. Bilingual.

McMaster University, Hamilton (9,469) — degrees in arts, science, commerce, engineering, medicine, music, nursing education, physical education, social work, theology.

University of Ottawa/Université d'Ottawa, Ottawa (11,708) — degrees in arts, science, administration, canon law, criminology, education, engineering, health administration, international co-operation, kimanthropology, law, medicine, mission studies, music, nursing, philosophy, physical education, psychology, recreology, planning, social sciences, theology. Bilingual.

Queen's University, Kingston (10,278) — degrees in arts, science, business, music, applied science, law, medicine, nursing, education, physical education, rehabilitation therapy, divinity, theology.

Royal Military College of Canada, Kingston (676) — degrees in arts, science, engineering.

Ryerson Polytechnical Institute, Toronto (9,205) — degrees in applied arts, arts, business, community services, technology.

University of Toronto, Toronto (33,197) — degrees in arts, science, architecture, commerce, community health, computing and data processing, dentistry, education, engineering, forestry, landscape architecture, law, library science, medicine, museology, music, nursing, pharmacy, physical and health education, social work, urban and regional planning.

Trent University, Peterborough (2,126) — degrees in arts and science.

University of Waterloo, Waterloo (14,208) — degrees in arts, science, architecture, engineering, environmental studies, human kinetics and leisure studies, integrated studies, mathematics, optometry, urban and regional planning.

University of Western Ontario, London (16,435) — degrees in arts, science, business administration, dentistry, education, engineering, science, journalism, law, library and information science, medical rehabilitation, medicine, music, nursing, physical education, social sciences, social work, theology.

Wilfrid Laurier University, Waterloo, (3,460) — degrees in arts, science, business and economics, divinity, music, social work.

University of Windsor, Windsor (6,160) — degrees in arts, science, business administration, computer science, education, engineering, fine arts, human kinetics, law, music, nursing, social work.

York University, Downsview (11,396) — degrees in arts, science, environmental studies, fine arts, education, administrative studies, law.

MANITOBA

Brandon University, Brandon (957) — degrees in arts, science, education, general studies, music.

University of Manitoba, Winnipeg (12,477) — degrees in arts, science, administrative studies, agriculture, architecture, engineering, fine arts, home economics, interdisciplinary law, medical rehabilitation, medicine, music, nursing, pharmacy, physical education, social work, education, dentistry.

University of Winnipeg, Winnipeg (2,288) — degrees in arts, science, education, theology.

SASKATCHEWAN

University of Saskatchewan, Saskatoon (9,275) — degrees in arts, science, agriculture, commerce, dentistry, education, engineering, fine arts, home economics, law, medicine, music, nursing, pharmacy, physical education, physical therapy, religious studies, theology, veterinary medicine, vocational agriculture.

University of Regina, Regina (3,556) — degrees in arts, science, administration, education, engineering, social work.

ALBERTA

Athabasca University, Edmonton (82) — degrees in general arts, general studies, administration.

The University of Alberta, Edmonton (18,075) — degrees in arts, science, agriculture and forestry, community development, commerce, dentistry, education, engineering, fine arts, food science, home economics, law, library science, medicine, music, nursing, pharmacy and pharmaceutical sciences, physical education, and recreation, rehabilitation medicine, theology.

The University of Calgary, Calgary (10,738) — degrees in arts, science, education, environmental design, fine arts, law, medicine, music, nursing, commerce, engineering, physical education, social work.

The University of Lethbridge, Lethbridge (1,470) — degrees in arts and science, fine arts, music, education, management arts.

BRITISH COLUMBIA

The University of British Columbia, Vancouver (19,468) — degrees in arts, science, agriculture, architecture, commerce and business administration, community and regional planning, dentistry, education, engineering, forestry, home economics, law, librarianship, medicine, music, nursing, pharmacy, physical education, rehabilitation medicine, social work.

Royal Roads Military College, Victoria (250) — degrees in arts and science.

Simon Fraser University, Burnaby (6,664) — degrees in arts, science, business administration, communication studies, computing science, criminology, education, general studies, kinesiology, natural resources.

University of Victoria, Victoria (5,472) — degrees in arts, science, education, law, fine arts, human and social development.

APPENDIX II

Agencies mentioned (with addresses)

Association of Atlantic Universities: 6080 Young Street, Suite 702, Halifax, Nova Scotia, B3K 5L2

Association of Universities and Colleges of Canada: 151 Slater Street, Ottawa, Ontario, K1P 5N1

Canadian Association of University Teachers: 75 Albert Street, Ottawa, Ontario K1P 5E7

Canadian International Development Agency: Place du Centre, 200, promenade du Portage, Hull, Quebec, K1A 0G4

Conference of rectors and principals of Quebec universities: C.P. 124, Succursale Place Desjardins, Montréal, Québec, H5B 1B3

Conseil des universités du Québec: 2700 boulevard Laurier, 8e étage, Ste-Foy, Québec, G1V 2L8

Conseil supérieur de l'éducation: 1035, rue de Lachevrotière, Québec, Québec, G1R 5A5

Council of Ministers of Education, Canada: Suite S500, 252 Bloor Street West, Toronto, Ontario, M5S 1V5

Council of Ontario Universities: 130 St. George Street, Suite 8039, Toronto, Ontario, M5S 2T4

Council of Western Canadian University Presidents: c/o President's Office, The University of Calgary, 2920-24th avenue, N.W., Calgary, Alberta, T2N 1N4

Department of Advanced Education and Manpower, Alberta: East Devonian Building, 5th floor, 11160 Jasper Avenue, Edmonton, Alta. T5K 0L1

Department of External Affairs: Lester B. Pearson Building, 125 Sussex Drive, Ottawa, Ontario, K1A 0G2

Fédération des associations de professeurs d'université du Québec: J.L. Roy, président, Département d'histoire, Université McGill, Édifice F. Cyril James, 845 ouest, rue Sherbrooke, Montréal (Québec) H3A 2T5

International Development Office: 151 Slater Street, Ottawa, Ontario, K1P 5N1

International Development Research Centre: 60 Queen Street, Ottawa, Ontario, K1G 3H9

Manitoba Universities Grants Commission: 395 Berry Street, Suite 11, Winnipeg, Manitoba, R3J 1N6

Maritime Provinces Higher Education Commission: King's Place, P.O. Box 6000, Fredericton, New Brunswick, E3B 5H1

Medical Research Council: Jeanne Mance Building, 20th floor, Tunney's Pasture, Ottawa, Ontario, K1A 0W9

Ministère de l'éducation du Québec: 1035, rue de Lachevrotière, Québec, Québec, G1R 5A5

Ministry of Colleges and Universities, Ontario: 22nd floor, Mowat Block, Queen's Park, Toronto, Ontario, M7A 1L2

National Sciences and Engineering Research Council: NRC Building M-58, Montreal Road, Ottawa, Ontario, K1A 0R6

Ontario Council on University Affairs: 700 Bay Street, 7th floor, Toronto, Ontario, M5H 2T8

Universities Council of British Columbia: 805 West Broadway, Suite 500, Vancouver, British Columbia, V5Z 1K1

Saskatchewan Universities Commission: 2302 Arlington Avenue, Saskatoon, Sask. S7J 3L3

Social Sciences and Humanities Research Council: 255 Albert Street, P.O. Box 1610 Ottawa, Ontario, K1P 6G4

APPENDIX III

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